1. Other types of VAD can also be used with the present invention with their corresponding set of prototype commands. Thus, using other types of VAD does not constitute a new different invention.

2. General purpose microprocessors or computers can be used instead of the DSPs. It is a designer's choice, and does not constitute a new and different invention.

3. In our preferred embodiment, magnetic induction means are used for transference of signal, information, and power across the skin without puncturing the skin. These devices and methods are well known to persons skilled in the art, and will not be described here.

CLAIMS

1. An enhanced ventricular assist device (EVAD) comprising of one or more ventricular assist device(s), and an installed means for sending electrical pulses to the patient's heart.

2 An EVAD according to Claim 1, with means for controlling either or both the pulse rate and voltage of said electrical pulses sent by said installed means to the patient's heart.

3. An EVAD according to Claim 1 with means for measuring clinical signals, and means for monitoring said clinical signals.

4. An EVAD according to Claim 3, with means for monitoring said clinical signals in synchronization with said electrical pulses.

5. An EVAD according to Claim 1 with a set of prototype commands and automatic means for carrying out any of the prototype commands one at a time.

6. An EVAD according to Claim 5 with a set of input clinical signals, and a built-in computer software for automatically selecting a prototype command in response to the set of input clinical signals, and automatic means for carrying out any of the software-selected protype command one at a time.

7. An enhanced ventricular assist device (EVAD) comprising of one or more linear flow blood pump(s), and an installed means for sending electrical pulses to the patient's heart.

8. An EVAD according to Claim 7, with means for controlling either or both the pulse rate and voltage of said electrical pulses sent by said installed means to the patient's heart.

9. An EVAD according to Claim 7, with means for measuring clinical signals, and means for monitoring said clinical signals

10. An EVAD according to Claim 9, with means for monitoring said clinical signals in synchronization with said electrical pulses.

11. An EVAD according to Claim 7, with a set of prototype commands and automatic means for carrying out any of the prototype commands one at a time.

12. An EVAD according to Claim 11, with a set of input clinical signals and a built-in computer software for automatically selecting a prototype command in response to the set of input clinical signals, and automatic means for carrying out any of the software-selected protype command one at a time.

13. An EVAD according to Claim 7, with control means for controlling the blood output pressure and volume of each of the linear flow blood pump(s) independently.

14. An EVAD according to Claim 13, in which said control means controls the blood output pressure and volume of each of the linear flow blood pumps by varying the magnitude and frequency of the electrical motor currents of said linear flow blood pump.

15. An EVAD according to Claim 7, in which magnetic induction means are used for transference of signal, information, and power across the skin without puncturing the skin.

LIST OF REFERENCES

[1] "Linear Flow Blood Pump" is the subject matter of US patent #

[2] Texas Instruments DSP Selection Guide May, 2001.